## **Environmental and labor issues:**

This is a category B project according to the IIC's Environmental and Social Sustainability Policy because building and upgrading housing under the Échale a tu casa program could produce certain moderate, short-term, and highly-local socio-environmental effects and risks of the kind that are typical of these types of infrastructure projects. These effects and risks can be avoided and mitigated by following performance rules, guidelines, good practices, and design criteria that are standard for the industry, which are well-known and easy to implement.

The main environmental and labor considerations related to the project are assessment and management of environmental and social risks and impacts, work and labor conditions, efficient resource management and pollution prevention, and community health and safety. During the project assessment, visits were made to one of the company's housing developments located in Venta Vieja, Acapulco Municipality, Guerrero, and to the program's main office located in Mexico City.

The practices observed during the assessment visit indicate that the Échale a tu casa program in general has in place a number of the elements comprising an Environmental and Social Management System (ESMS), described herein. However, it was noted that the program must strengthen its current risk and environmental and social impact management practices through a formal ESMS that brings together all these elements along with others that are currently missing, such as a corporate environmental and social policy and written procedures for responding to emergency situations and handing occupational safety and health during the construction phase. Regarding this, the IIC will require the Borrower to commit to developing a corporate-level ESMS that is appropriate for the size and nature of its operations and in line with the international good practices established in the International Finance Corporation's Performance Standard 1 on the assessment and management of environmental and social risks and impacts. The Borrower will also commit to implementing the ESMS, including by making its employees aware of it and implementing its policies and procedures in every region where the Échale a tu casa program operates.

The development of the ESMS and its implementation will be part of an Environmental and Social Action Plan (ESAP) that the Borrower will agree on with the IIC and execute during the project. Once the ESAP's measures have been completed, compliance with the IIC's environmental requirements as established in its Environmental and Social Sustainability Policy will be verified.

Assessment and Management of Environmental and Social Risks and Impacts: In practice, the Échale a tu casa program follows a procedure to ensure that the assisted do-it-yourself construction of the home takes place only on land approved for the construction of urban infrastructure; that is not in an unsafe place (for example, river banks or unstable soil); that is not a critical natural habitat or protected natural area; that does not involve situations of involuntary resettlement; and that follows all applicable Mexican law. This procedure is carried out in close coordination with the proper authorities including CONAVI; state governments through the corresponding housing institute; and municipal authorities. It includes obtaining the necessary licenses and permits.

The program Échale a tu casa requires each participating family to have a plot that is suitable for the construction or improvement of a home. The families participating in the program live in the country's suburban and/or rural communities. Communities are selected in coordination with the proper authorities. The program includes a social agreement process that is carried out through a housing committee formed by the members of the participating community. The views of the program's participants are evaluated through quality surveys conducted during the promotion, construction, and post-sale stages.

**Workplace and Labor Conditions:** Échale provides all its employees with the benefits established under Mexican labor regulations. In addition to the personnel that work in the main office, the Borrower has a number of field personnel—architects and engineers—who spend most of their time working on project sites. The program also offers job opportunities to people from the participating communities. They are engaged for a set amount of time and in compliance with Mexican labor law. Those interested can work on the manufacture of the adoblocks or on building the homes.

The manufacture of the adoblocks, which are used to build the homes, involves relatively simple, low-risk labor carried out by members of the participating communities. These individuals, who are mostly women, are given the training necessary to operate the mechanical press (adopress) that forms the blocks. The work is closely supervised by an Échale technician. The personnel that works on manufacturing the blocks is hired to do this work and is compensated according to the number of blocks manufactured.

For building the homes, specialized labor is hired locally and includes bricklayers, plumbers, and electricians. Their experience is evaluated by Échale's technical department and they are also provided with additional training if necessary. All workers are paid for their work in compliance with Mexican labor regulations.

Échale provides all its employees with personal safety equipment that is appropriate to the work being done. Nevertheless, during the course of the project with the IIC, Échale must improve its management of occupational safety and health issues, particularly as regards supervision of the use of personal safety equipment during the construction phase.

**Efficient Use of Resources and Pollution Prevention:** Ninety percent of the material of the adoblocks used to build the homes comes from earth sourced locally, eliminating the need to extract it and ship it from another location. All the waste material is recycled to make new adoblocks, and any waste from a construction site (for example, gravel from demolition work) is generally used as fill to level the floors of the homes being built.

The adoblock material is certified by the proper Mexican authorities for use in the home construction industry. The certification covers technical characteristics such as thermal and acoustic qualities, ease of production, and cost.

The families participating in the program live in the country's suburban and/or rural communities, where oftentimes the land where homes are built does not have basic services such as gas, plumbing, or electricity. In these cases, energy-saving wood-burning stoves are installed that use 65% less wood compared to a traditional wood-burning fireplace or stove; waste water is discharged in a septic tank (biodigestor) for treatment; devices are installed so the family can use solar power when it wishes to; and fixtures are installed to capture rain water for use.

**Community Health and Safety:** The assisted do-it-yourself home building program for low-income families ensures that its projects comply with the Mexican labor regulations applicable to the home building sector. The program also follows UN-HABITAT standards on the right to adequate housing. For example:

- The homes are built on land that the families already own and do not involve moving the family to different area. Échale ensures that its clients have the permits necessary to build on the land they have and provides the necessary advisory services where needed. Once home construction is complete, clients are given title to the property;
- All the needs of the families are taken into account when designing the homes. To do this, Échale

holds workshops in which the communities participate by expressing their opinions. This is to ensure that communities' traditions and customs are respected and that people are satisfied with the design that is agreed upon;

- The homes are built with a material known as stabilized adobe, consisting mainly of earth. As a result, the buildings are more affordable and highly thermally efficient: warmer in the winter, cooler in the summer. Échale also ensures that the foundations of the homes comply with applicable Mexican regulations to prevent structural damage.
- All of Échale's homes are delivered with electricity, plumbing, gas, and running water, and the owner is given a maintenance manual. The program's participants receive post-sale warranties when they buy their homes.

With an eye toward social responsibility, the Échale a tu casa program also provides participating communities with a series of workshops on issues such as intrafamily violence, alcoholism and drug abuse, financial education, and waste disposal and recycling. The workshops are offered by personnel from the local municipal authorities or by volunteer specialists with non-profit, non-governmental organizations.

**Monitoring and Reporting:** The Borrower will draw up an Environmental and Social Action Plan acceptable to the IIC and submit annual monitoring reports on the issues outlined in this summary. During the life of the project, the IIC will monitor ongoing compliance with its own environmental and labor review guidelines by evaluating monitoring reports submitted annually to the IIC by the borrower and conducting regular field visits as part of the project supervision process.